

#### An Energy Efficiency Workshop & Exposition

Kansas City, Missouri

## Omaha Public Power District Offutt Air Force Base

## A Successful Partnership







## **Presentation Outline**



- OPPD Background
- Offutt AFB Profile
- Driving Forces
- PC Solution
- Task Order Summary
- Conclusion

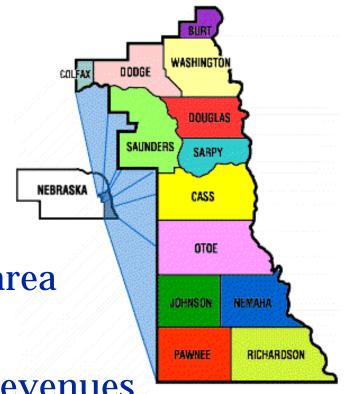






#### • Who We Are

- Public Utility
- Over 290,000 customers
- ▶ 13 SE Nebraska counties
- > 5,000 sq. miles of service area
- 2,298 employees
- \$567.7 Million operating revenues



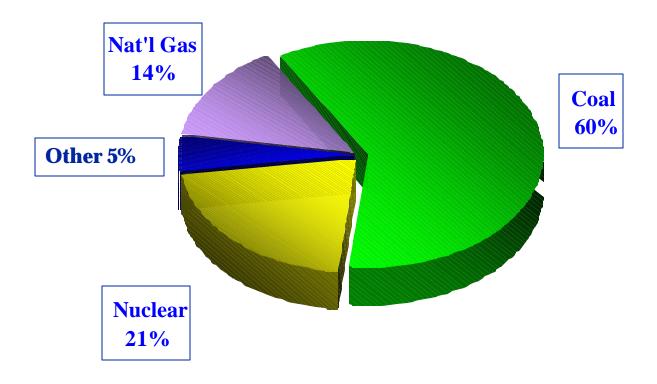
We Put
Everything
on the Line
for You.





## Generation Facilities

# Total Generation Capability 2,209,600 kW

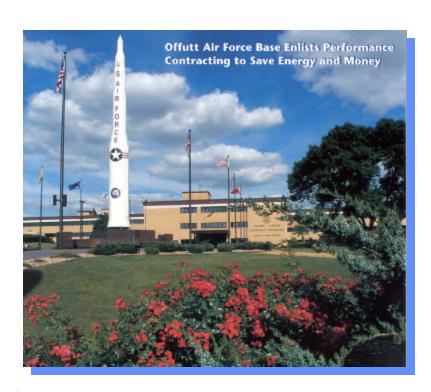




## Offutt Air Force Base



- 3rd Largest OPPD Customer
- 34 Megawatts
- WAPA Allocation
- 1.79 Cents/kWh
- Over 10 Million sq. ft.









- Legislative Initiatives
  - Energy Policy Act of 1992
  - Executive Order 12902 (3/94)
    - Curb Energy Consumption 30% by 2005
  - Executive Order 13123
    - Requires Federal agencies to reduce energy use in Federal buildings by 35% from 1985 levels by 2010
- Federal Utility Partnership Working Group



## The Solution:







## PC Steps



Walk-thru Audit and Proposal

Comprehensive Energy Analysis

**Execute Performance Contract and Financing** 

**Engineering Design** 

**Project Implementation** 

**Training & Commissioning** 

Savings Monitoring & Service



## Teamwork Approach



#### Internal team

- Customer Sales & Service
- Project Management
- > Finance
- Legal

#### External team

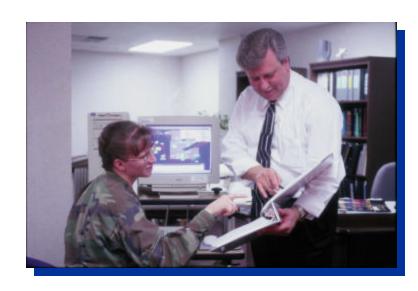
- Maintenance Engineering
- Contracting
- > ACC







- Direct Digital Controls
- 11 Buildings
- \$2,706,510
- Financing
- Status





## Hannon Armstrong & Co.



- Federal Energy Project Experience
- Willingness to Share Information
- Competitive Rate
- Sale of Receivables







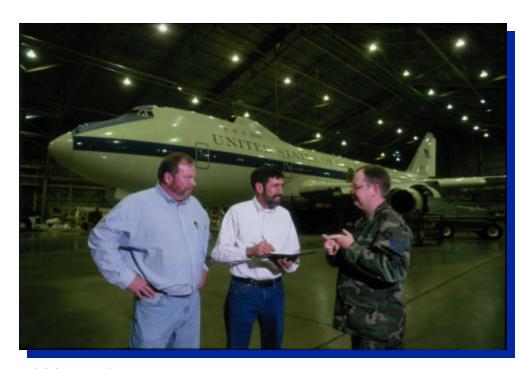
- Building #301
- Direct Digital Controls
- Replace Air Handlers
- Replace Steam Traps
- \$919,761
- Status







- Direct Digital Controls
- Building 457
- \$870,276
- ECIP Funding
- Status







## Scope Varied

- Replace chillers & hot water tank
- Replace boilers
- Install DDC & CO2 ventilation
- ➤ Install VFD's
- Insulate water tank
- \$1.9 million upgrade





## **Task Order 5,6, & 7**



- Geothermal Heat Pumps
  - Several facilities
- Water Conservation
  - Golf Course irrigation
  - Demand control
- Lighting
  - Numerous facilities
- \$3.2 million Upgrade

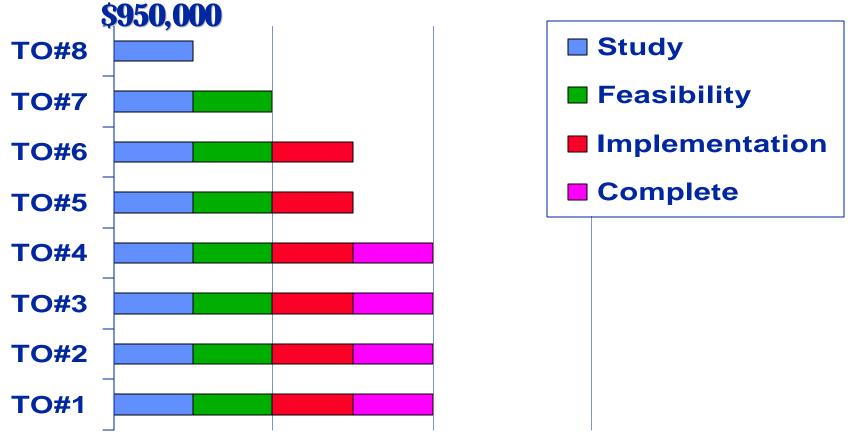








## **\$8.23 Million Upgrades Result in Decreasing Offutt's Annual Energy Costs by over**





## Other Projects



- Load Curtailment Agreement
- Special Project Grant
- Privatization
- Harding Award





